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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/810,835 | 03/29/2004 | Akihiro Ima | 0666.1760002/TGD/EDH | 9970 |

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WASHINGTON, DC 20005

EXAMINER

ENGLISH, PETER C

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3616

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,835

Applicant(s)

IMA, AKIHIRO

Examiner

Peter C. English

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 5-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/876,092.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040329.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Preliminary Amendment

1. The preliminary amendment and substitute specification filed on 29 March 2004 have been entered.

Declaration

2. The declaration filed on 29 March 2004 is defective because it fails to accurately identify the specification to which it is directed. In particular, the title of the invention is omitted from the declaration. Further, it is noted that the declaration fails to identify the attorney(s) appointed by applicant. A substitute oath or declaration is required.

Drawings

3. The drawings are objected to because:
In Figs. 2 and 8, "47" should be "49". See paragraph 50.
In Fig. 8, "88" and "95" should be " 88' " and " 95' ", respectively. See paragraphs 68-70.
4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the

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following is required: The specification fails to describe the power take-off 15 as transmitting rotational force that is “synchronous” with the rotation of the first axles (claim 1, lines 10-11).

Claim Objections

6. Claims 5-7 are objected to because:

In claim 5, at line 5, “rear or front portion” should be “of the front and rear portions”.

In claim 5, at lines 8 and 12, the comma should be deleted.

In claim 5, at lines 8 and 12, “said respective” should be “respective ones of said”.

In claim 5, at line 10, the acronym “PTO” should be defined.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Lines 3-4 of claim 6 are indefinite because they appear to contradict the language of previous claim 5. Claim 5 positively states that operation of the common brake operator causes each of the first and second brake devices to be simultaneously actuated (see lines 19-22). However, lines 3-4 of claim 6 state that the second brake device remains unactuated when the common brake operator is operated.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Teraoka (US 4,899,859). Teraoka discloses a brake system comprising: a front transaxle 5 driving steerable

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front wheels 49, 51 by means of front differential 29 and front drive shafts 45, 45; a power take-off 55 incorporated into the front transaxle 5; a rear transaxle 165 having an input 167 connected to the power take-off 55 and driving rear wheels 179, 181 by means of rear differential 171 and rear drive shafts 175, 175; a brake pedal 155 operating a master cylinder 153 connected to front wheel brakes (not shown) and rear wheel brakes (not shown) by hydraulic passages 149, 151 (see column 5, lines 46-53); and a brake 140 that brakes the input 167 of the rear transaxle 165, the brake 140 being actuated by the master cylinder 153 simultaneously with the front and rear wheel brakes (see column 5, lines 46-53; column 6, lines 49-58). The front wheel brakes (not shown) impart a braking force to the front drive shafts 45, 45.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 5 and 7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,634,446 in view of Teraoka (US 4,899,859). Claims 1-4 of U.S. Patent No. 6,634,446 recite the invention substantially as claimed in the instant application, except that the claims of the patent fail to

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recite a common brake operator that simultaneously operates a pair of brakes on one transaxle and a brake that brakes the input of the other transaxle. Teraoka teaches a brake system comprising: a front transaxle 5 driving steerable front wheels 49, 51 by means of front differential 29 and front drive shafts 45, 45; a power take-off 55 incorporated into the front transaxle 5; a rear transaxle 165 having an input 167 connected to the power take-off 55 and driving rear wheels 179, 181 by means of rear differential 171 and rear drive shafts 175, 175; a brake pedal 155 operating a master cylinder 153 connected to front wheel brakes (not shown) and rear wheel brakes (not shown) by hydraulic passages 149, 151 (see column 5, lines 46-53); and a brake 140 that brakes the input 167 of the rear transaxle 165, the brake 140 being actuated by the master cylinder 153 simultaneously with the front and rear wheel brakes (see column 5, lines 46-53; column 6, lines 49-58). From this teaching of Teraoka, it would have been obvious to modify claims 1-4 of Patent No. 6,634,446 by providing a common brake operator that simultaneously operates a pair of brakes on one transaxle and a brake that brakes the input of the other transaxle in order to improve the braking and cornering performance of the vehicle.

Allowable Subject Matter

12. Claim 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

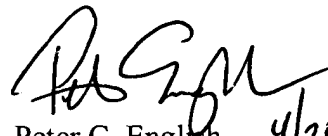
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hill and Hueckler et al. teach four wheel drive systems with drive train brakes. Akutagawa et al. teaches a four wheel drive system with front and rear transaxles.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter C. English whose telephone number is 571-272-6671. The examiner can normally be reached on Monday through Thursday (7:00 AM - 5:00 PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Peter C. English
Primary Examiner
Art Unit 3616
4/25/05

pe
25 April 2005